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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
OWENS JR, HOWARD V	
ART UNIT	**PAPER NUMBER**
1623	23

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/276,014	SI LE, ANH	
	Examiner	Art Unit	
	Howard V Owens	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Action following Board of Appeals Decision

The following is in response to the Board of Appeals Decision mailed 8-14-03:

An action on the merits of claims 1, 2 and 4-13 is contained herein below.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

It should be noted that the 35 U.S.C. 103 rejection of record is maintained. The rejection merely recites the fact that the prior art of Mentink had demonstrated component B of the composition at less than 34.3%. The demonstration that Mentink possessed the component within the claimed range was set forth in the Examiner's Answer, mailed on 6-5-02. The board of Appeals noted that the rationale for how the prior art taught component B within the claimed range was different than that set forth during prosecution; however, neither the merits of what is actually taught by Mentink nor the examiner's motivation set forth in the Examiner's answer was adjudicated on.

It is further noted that the board limited the examiner's rationale for the presence of an acidulant as being based on "common knowledge or common sense". However, the examiner's answer demonstrates that this was not the case. The obvious use of an acidulant was based on the objective evidence present in the application, as cited on pp. 9 – 10 of the examiner's answer, recited and included below.

35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mentink et al.(Mentink), U.S. Patent No., 5,314,701 and acknowledged prior art.

Mentink et al. teach a sugar free hard candy containing hydrogenated saccharides wherein the DP values and proportions of the saccharides are analogous to those set forth in the instant invention (see column 6, line 29 - column 7, line 68) also containing a crystallisable polyol such as isomalt (see example 1) wherein the transition glass temperature (tgc) is between 60 and 90 C (col. 6, line 66) analogous to the tgc set forth in the instant claims. Mentink teaches that "hard candies" containing these proportions has the advantages of good thermal stability and malleability, low hygroscopic nature and also anticaries properties (col. 5, line 43 – col. 6, line 19). Mentink has set forth ranges wherein the DP values and proportions of the saccharides analogous to those set forth in the instant claims (col.6, lines 40-60).

Component	DP	wt.%	Mentink wt%
A	1	2.6-7	1-17
B	2	<34.3	30-90
C	3	<15	10-30
D	4-10	<30	5-25
E	>11	<38	>1-54

Mentink further teaches that the lower limit of wt% for polymers with a DP=2 is actually 30%, see column 6, lines 24 – 29, wherein Mentink teaches a preferred embodiment is to have more than 30% of molecules having a DP equal to 2. Thus the teachings of Mentink encompass polymers wherein the DP=2 at a wt% of less than the claimed 34.3 wt%.

Mentink does not specifically teach the inclusion of an acidulant as in claim 12; however, the use of acidulants such as malic acid, citric acid or tartaric acid in this food

art is common practice as acknowledged by applicant in the specification, Description of the Prior Art,_ p. 2, lines 6-18, specifically lines 14-15:

"Generally, sugar-free hard boiled sweets are manufactured by boiling a mixture of polyols.....The molten mass which is obtained is then cooled and cast or deposited into moulds or formed on rolls or by extrusion after the addition of various ingredients, such as flavorants, colorants, intense sweeteners, fillers, **acidulants**.....".

As cited in *In re Nomiya*, 509 F.2d 566, 571 n.5, 184 USPQ 607, 611 n.5 (CCPA 1975), "By filing an application containing ..... labeled prior art, ipsissimis verbis, and statements explanatory thereof appellants have conceded what is to be considered as prior art in determining obviousness of their improvement."

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

In accordance with factor no. 4, applicant's acknowledgement that the prior art has recognized the use of acidulants within the processing of these sugar free hard candies is clearly objective evidence which indicates that the use of acidulants, such as malic acid, would be obvious to one of skill in the art and is therefore, not novel. Applicant claims that the composition of matter does not generally claim the use of an acidulant in combination with HSH of claim 1; however, the claim recites that the encapsulation of the acidulants comprises the HSH of claim 1. The open claim language of "comprising" does not provide for a composition wherein the HSH and the acidulant are separate, moreover, even assuming *arguendo* that the composition separates the acidulant from the HSH, applicant's specification uses the acidulant as a secondary ingredient commensurate to it's use in the prior art (along with other secondary ingredients such as vitamins, plant extracts, fillers intense sweeteners), wherein it is added to the

composition blend, p. 11, lines 19-24. The objective evidence present in the specification clearly demonstrates that what applicant terms as "encapsulation" is merely the addition of the acidulent (powdered malic acid) to the molten HSH blend (see Example 1, p. 14 for example), which is synonymous with applicant's acknowledged state of the art with regards to the addition of secondary ingredients to sugar free hard boiled formulations.

It would have been prima facie obvious to a person of ordinary skill in the art at the time the invention was made to combine the monosaccharides, disaccharides, oligosaccharides and polysaccharides in a composition with the concentrations claimed.

A person of ordinary skill in the art would have been motivated to produce the composition as claimed given the art recognized benefits of a sweetening composition that has good thermal stability and malleability, low hygroscopic nature and also has anticaries properties.

Howard V. Owens
Patent Examiner
Art Unit 1623

James O. Wilson
Supervisory Patent Examiner
Technology Center 1600

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard Owens whose telephone number is (703) 306-4538 . The examiner can normally be reached on Mon.-Fri. from 8:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the Supervisory Patent Examiner signing this action, James O. Wilson can be reached on (703) 308-4624 . The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.